

Amendments to the Claims:

Amendments to the Claims:

1 – 3 (Canceled)

4. (Currently Amended) A method for constructing a knowledge representation, the method comprising the steps of:

- a) selecting scientific articles to serve as information sources for the knowledge representation, wherein the selected articles are stored on a computer;
- b) extracting information, ~~contained in the articles~~ including facts, contained in the articles expressed in the article's natural language;
- c) formatting the information, including facts, for storage in the knowledge representation according to an ontology comprising classes and individuals;
- d) verifying that formatted information, including facts, extracted from the selected articles ~~are~~ is correct;
- e) verifying that formatted information, including facts, extracted from the selected articles ~~are~~ is placed in the correct format for storage in the knowledge representation; and
- f) storing the formatted facts in the knowledge representation.

5. (Canceled)

6. (Currently Amended) The method of claim 48 wherein both the extracting steps of extracting and the verifying steps are performed by the same person, ~~which~~ wherein the person has been qualified by a predetermined procedure to perform both steps simultaneously.

7. (Original) The method of claim 4 or claim 60 wherein at least the steps of extracting and verifying occur in geographically separated locations.

8. (Original) The method of claim 7 wherein the geographically separate locations are chosen based upon the cost of performing the respective steps of extracting and verifying, the lowest cost location for each step being selected.

9. (Previously Presented) The method of claim 4 or claim 60, wherein the extracting information step includes using a computer-driven parser of natural language.
10. (Canceled)
11. (Canceled)
12. (Currently Amended) A system for extracting information from scientific articles originating from a first database and storing the extracted information in a second database, the system comprising:
- a) an information extractor that extracts a finding from an article's natural language and translates this finding into a structured finding for storage according to an ontology comprising classes and individuals, wherein the information extractor is an application program;
 - b) an information extractor that extracts a an article's natural language for storage, wherein the information extractor is an application program;
 - c) a content reviewer in communication with the information extractor for verifying whether the structured finding has been properly formatted for storage in the second database, wherein the content reviewer is an application program; and
 - d) a computer system in communication with the second database for storing the structured finding in the second database.
13. (Previously Presented) The system of claim 12, further comprising a query management and information display unit for responding to user inquiries for information stored in the second database and for retrieving information from the second database in response to those queries.
14. (Previously Presented) The system of claim 12, wherein the second database is frame-based.
15. (Previously Presented) The system of claim 12, wherein the structured finding is formatted according to a fact-based model.
16. (Previously Presented) The system of claim 12, wherein the relationship between the object and process takes the form of the process being an action that acts upon the object.

17. (Previously Presented) The system of claim 12, wherein the object is a gene, protein, cell, or organism.
18. (Previously Presented) The system of claim 12, wherein the finding is derived from one or more sentences, a portion of a sentence, a diagram, figure or table.
19. (Cancelled)
20. (Previously Presented) The system of claim 12, wherein the first database is coupled to, and in communication with the information extractor.
21. (Previously Presented) The system of claim 12, further including a server, for selecting articles for information extraction from among a plurality of articles residing in the first database.
22. (Previously Presented) The system of claim 12, wherein the article's representation of the finding has a first format and wherein the translation of the finding includes a translation of the finding into a natural language having a second format.
23. (Previously Presented) The system of claim 12, wherein information is extracted using a user template.
24. (Previously Presented) The system of claim 12, wherein information is extracted using a computer driven parser of the natural language.
25. (Previously Presented) The system of claim 12, wherein the structured finding comprises a first object, second object and a process relationship.
26. (Previously Presented) The system of claim 12, wherein the structured finding comprises an object, a process and a process relationship.
- 27-34. (Canceled)
35. (Previously Presented) The system of claim 12, wherein the object is an effector of a plurality of processes and all of these processes are actions that act upon a second object.
36. (Previously Presented) The system of claim 12, wherein the article's natural language includes a first and second finding and wherein the first finding comprises the process and object and the object includes the second finding.

37. (Currently Amended) A system comprising:

a) a server configured to:

1) select an article from a database for extraction;

2) assign an article to an information extractor for:

i) extraction of information from an article to be structured for storage according to an ontology comprising classes and individuals, and

ii) for extraction of natural language from the article;

3) receive information extracted by information extractor;

4) assign the article and extracted information to a content reviewer;

5) receive corrections to extracted information from the content reviewer; and

b) an information store for storing the extracted information.

38. (Previously Presented) The system of claim 37, further comprising the server configured to:

1) assign the article to an information model structure reviewer;

2) receive changes or updates to information model structure from the information model structure reviewer; and

3) store changes or updates to information model structure in the information store.

39. (Previously Presented) The system of claim 37, wherein the information extraction process and content review process are performed at different geographical sites.

40. (Previously Presented) The system of claim 37, wherein the server is further configured to receive information about quality control metrics.

41. (Previously Presented) The system of claim 40, wherein the server is further configured to store information about quality control metrics in the information store.

42. (Previously Presented) The system of claim 37, wherein the server is further configured to comprise a query management and information display unit for responding to user inquiries for

information stored in the information store and for retrieving information from the information store in response to those queries.

43. (Previously Presented) The system of claim 37, wherein the information store is frame-based.

44. (Previously Presented) The system of claim 37, wherein the structured information is formatted according to a fact-based model.

45. (Previously Presented) The system of claim 37, wherein the relationship between the object and process takes the form of a process being an action that acts upon the object.

46. (Previously Presented) The system of claim 37, wherein the structured information is derived from one or more sentences, a portion of a sentence, a diagram, figure or table.

47. (Previously Presented) The system of claim 37, wherein the information store includes an ontology.

48. (Previously Presented) The method of claim 4, wherein the extracting information step is performed by knowledge extraction personnel and the verifying step is performed by quality control personnel.

49. (Previously Presented) The method of claim 4, wherein the extracted information includes metadata on the facts.

50. (Previously Presented) The method of claim 4, wherein the facts comprise as an object and process relationship.

51. (Previously Presented) The method of claim 50, wherein the relationship between the object and process takes the form of the process being an action that acts upon the object.

52. (Previously Presented) The method of claim 50, wherein the object is a gene, protein, cell, or organism.

53. (Previously Presented) The method of claim 4, wherein the facts comprise a first and second physical object that are related by a process.

54. (Previously Presented) The method of claim 4, wherein the information is extracted from one or more sentences, a portion of a sentence, a diagram, figure or table.

55. (Previously Presented) The method of claim 4, wherein the information is extracted using a template.
56. (Previously Presented) The system of claim 37, wherein the extracted information comprises facts expressed as an object and process relationship.
57. (Previously Presented) The method of claim 4, wherein the ontology further comprises slots, relations or facets.
58. (Previously Presented) The system of claim 12, wherein the ontology further comprises slots, relations or facets.
59. (Previously Presented) The system of claim 37, wherein the ontology further comprises slots, relations or facets.
60. (New) The method of claim 4 further comprising storing the article's natural language in the knowledge representation wherein the stored natural language is selected to provide context for the extracted information, including facts, and wherein the stored natural language maintains the original terminology from the article for the extracted information, including facts.